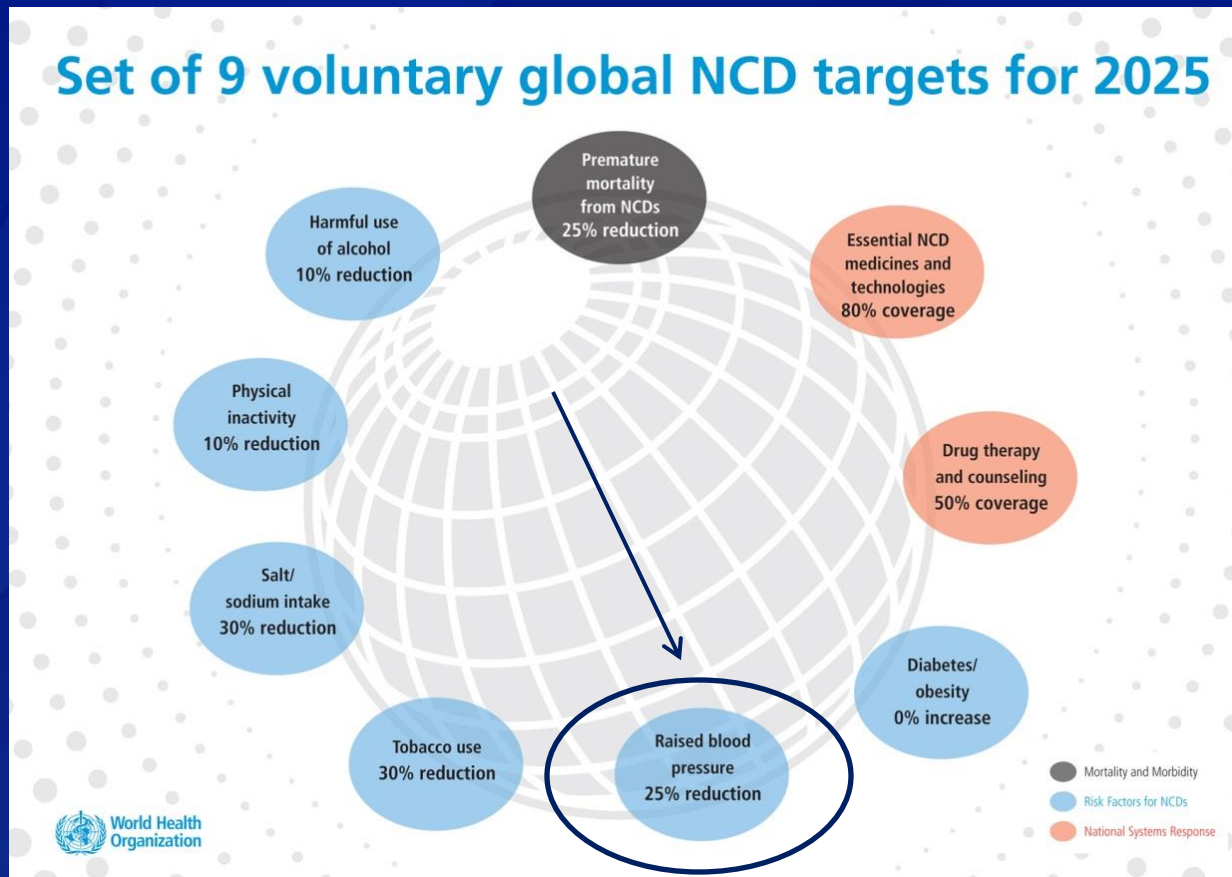




Speaker's Slides 2014

The Call to Act is Global, the Time to Act is Now

WHO Global Monitoring Framework with targets and indicators



Hypertension

❑ Prevalence

- ~ 1/3 of adults
- 1 billion people worldwide

❑ Costs of non-optimal blood pressure

- Hypertension cost \$372 billion (US) in 2001
- 10% of the overall healthcare expenditures

❑ If blood pressure levels remain unchanged over the next 10 years . . .

- \$1 trillion globally in direct healthcare expenses
- \$3.6 trillion in indirect costs

❑ Spending more on BP can mean spending less on other health care needs



Barriers to Blood Pressure Control

□ Patient

- Limited access to treatment
- Poor adherence to treatment

□ Health Care Provider

- Raised blood pressure attributed to “white coat” hypertension
- Reluctance to treat an asymptomatic condition
- Lack of adequate time with patient
- Therapeutic inertia
- Lack of adherence to current treatment guidelines

□ Health Systems

- Failure to delegate responsibility to non-physicians
- Inappropriate follow-up
- Absence of feedback to clinicians
- Issues related to supply, distribution, and cost of medications
- Complex medication regimens



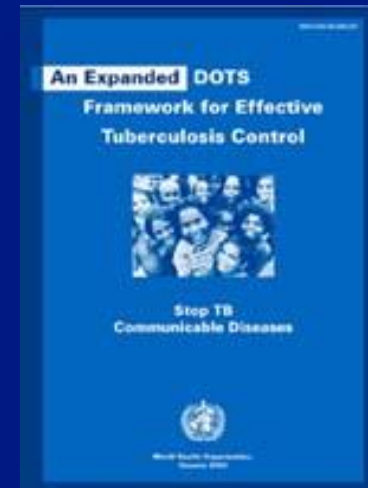
Building on Lessons Learned from Tuberculosis

❑ Structured approach

- High quality standardized care, including specific medications
- Diagnosis and treatment
- Management and support systems

❑ Targets and indicators define further actions and additional indicators

- Expansion of services
- Identifying and treating more patients
- Reducing the burden of disease



Results from Kaiser Permanente

- **From 2001 to 2009**

- Hypertension control rate nearly doubled from 44% to 80%
- Hypertension registry increased from 349,937 to 652,763 persons
- Controlled hypertension tripled from 171,000 to 531,000
 - 359,000 more people had controlled hypertension

- **Six care processes implemented**

- Evidence Based Guideline development
- Hypertension Registry creation
- Performance measure distribution
- Successful practice dissemination
- Single Pill Combination therapy promotion
- Non-physician BP visit creation

Call to Action

- ❑ Effective treatment has potential to significantly improve global population health
- ❑ Development of a strategy and framework
 - for standardizing the pharmacologic treatment of hypertension that is both feasible and flexible to have worldwide applicability
 - that acknowledges and supports use of existing evidenced-based guidelines for diagnosis and treatment of hypertension
- ❑ The project is not purposed to replace existing and recognized hypertension guidelines.

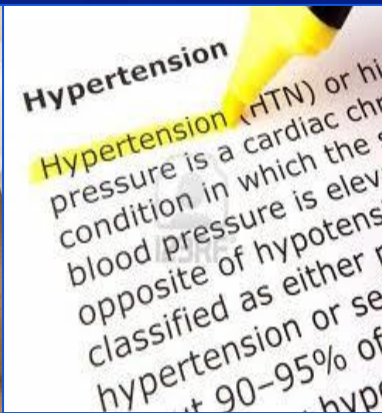
Global Standardized Hypertension Treatment

□ Purpose

- To support the development of a strategy and framework for standardizing hypertension medication treatment to have worldwide applicability

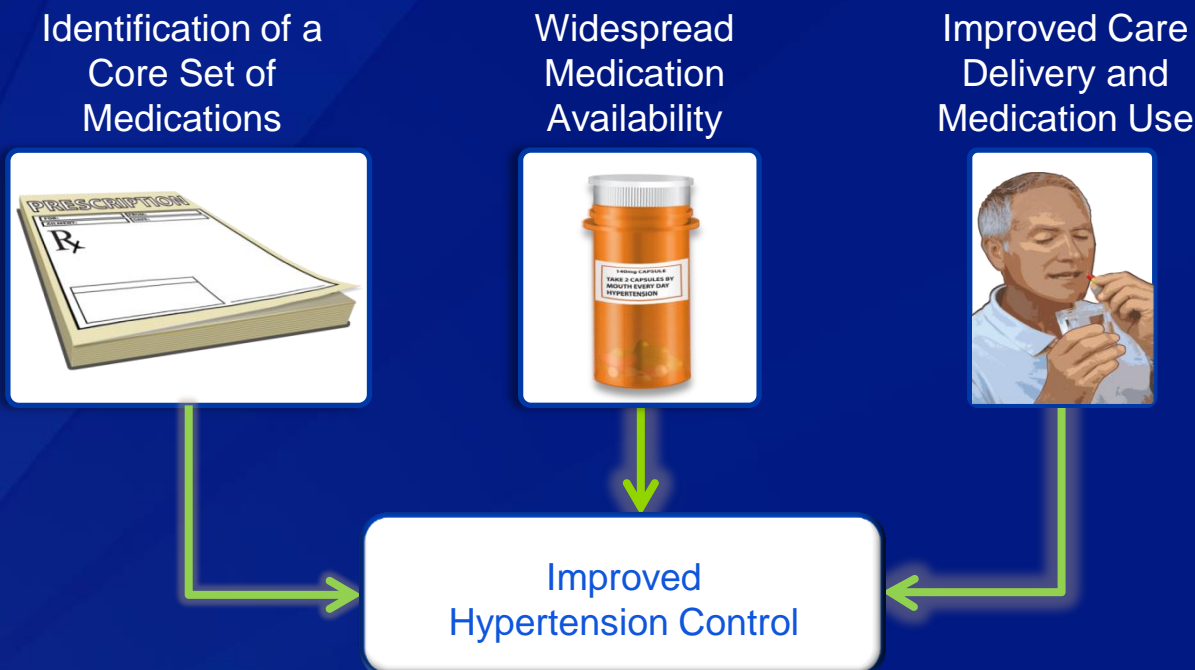
□ Regional collaboration to start

- Centers for Disease Control and Prevention (CDC)
- Pan American Health Organization (PAHO)
- Key stakeholders and organizations across the Americas

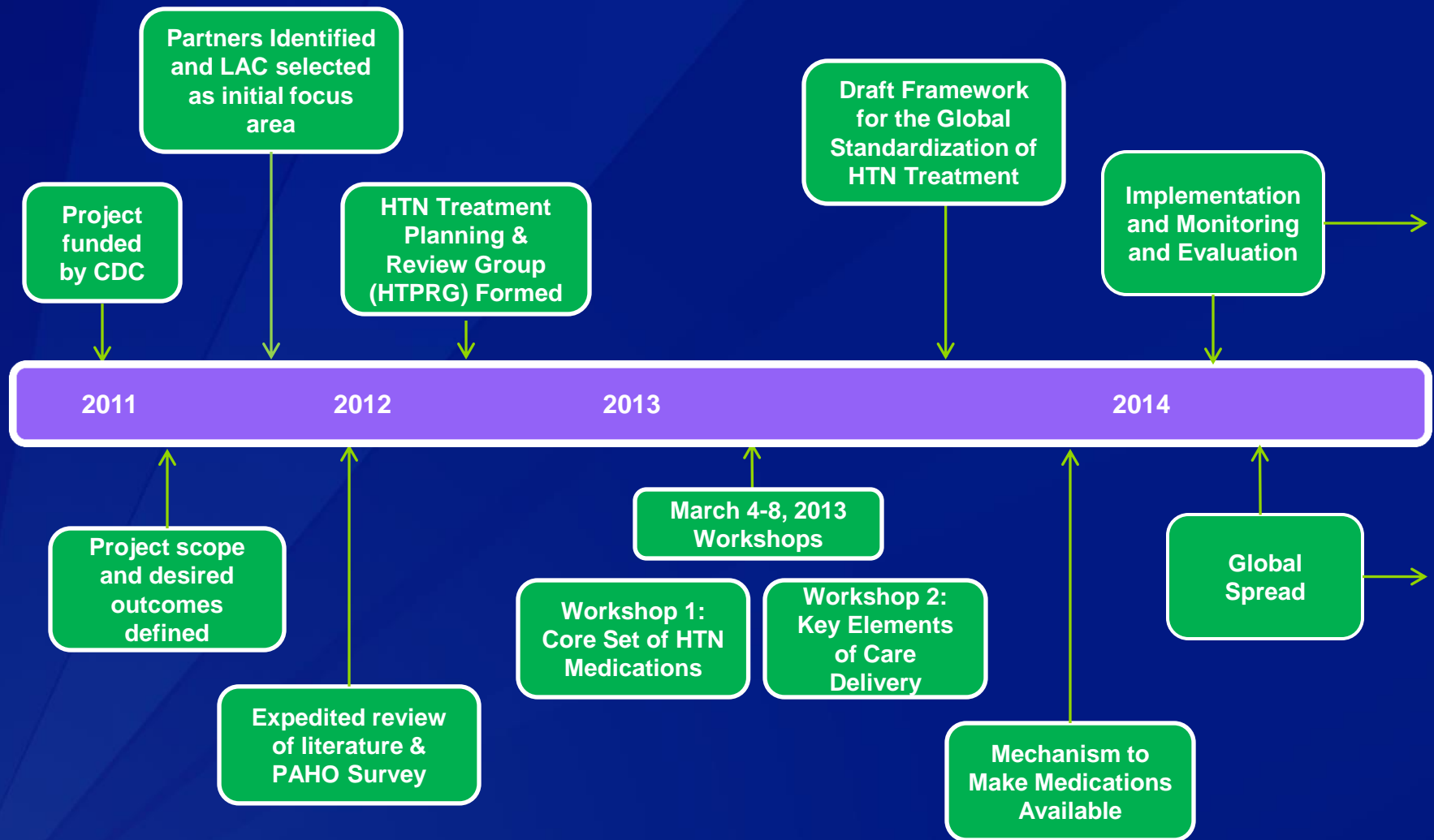


A Framework for the Pharmacologic Treatment of HTN

Standardize, Simplify.



Global Standardized Hypertension Treatment Project Timeline



March 2013 Miami LAC Workshop Attendees

- ❑ **CDC**
- ❑ **PAHO**
- ❑ **Ministries of Health**
- ❑ **Physicians**
- ❑ **Pharmacists,
pharmacologists**
- ❑ **Epidemiologists**

❑ **Society Representation:**

- American Heart Association
- Barbados Drug Service
- Caribbean Cardiac Society
- Healthy Caribbean Coalition
- InterAmerican Society of Cardiology
- Latin American Federation of Obstetrics and Gynecology
- Latin American Society of Hypertension
- Society of Latin American Nephrology and Hypertension
- World Heart Federation

Core Set of Medications

Medication Class	Primary	Backup
DIURETIC	Chlorthalidone	Hydrochlorothiazide (HCTZ)
ACE INHIBITOR	Lisinopril	Enalapril
ARB	Losartan	Valsartan
CCB	Amlodipine	None
BB	Bisoprolol	Metoprolol SR
OTHER	Spirolactone	None
<i>*Fixed Dose Combinations (Single Pill)</i>		
ARB + CCB	Losartan + Amlodipine OR Valsartan + Amlodipine	N/A
ACE INHIBITOR + CCB	Benazepril + Amlodipine	N/A
ACE INHIBITOR + DIURETIC	Lisinopril + HCTZ	N/A
ARB + DIURETIC	Losartan + HCTZ	N/A
ARB + DIURETIC + CCB	Valsartan + HCTZ + Amlodipine	N/A
<i>**Ideal Fixed Dose Combinations (Single Pill)</i>		
ARB + CHLORTHALIDONE + CCB	ARB + Chlorthalidone + CCB	N/A
ACE INHIBITOR + CCB	Lisinopril + Amlodipine	N/A
ACE INHIBITOR + DIURETIC	Lisinopril + Chlorthalidone	N/A
ARB + DIURETIC	Losartan + Chlorthalidone	N/A
ARB + CCB	Losartan + Amlodipine	N/A

Enhancing Availability of Core Medications in Latin America and the Caribbean: The PAHO Strategic Fund

- ❑ PAHO Strategic Fund procures quality medications at low cost for the Latin American region.
- ❑ Countries in the region may opt to use this mechanism for medication purchase.
- ❑ Since the March 2013 Global Standardized Hypertension Treatment Project workshops, the Strategic Fund met to review adding to their Medicine List (drugs available for procurement). Workshop identified core medications were considered.
- ❑ Currently four of the core primary medications, and three of the core back-up medications are on their Medicine List.

Key Elements of a Care Delivery to Support Hypertension Treatment And Control

- ❑ **Strategy**
- ❑ **Guidelines**
- ❑ **Registries/Information Systems**
 - For cohort monitoring and accountability
- ❑ **Medications**
 - Standardized, broadly available, integrated into treatment protocols
- ❑ **Patient-Centeredness (including self-management interventions)**
- ❑ **Care System (organizational management to implement a primary health care-led system)**
- ❑ **Community**





Global Standardized
Hypertension
Treatment Project

Clinical Toolkit

- ❑ Developed toolkit for healthcare providers and administrators
- ❑ Includes:
 - Overview of hypertension
 - Webinar on using registries to manage panels of patients and track indicators
 - Webinar on using standardized treatment protocols to improve hypertension treatment and control in clinical settings
 - Educational materials for patients and providers
 - Clinical tools for hypertension management
 - Tools to improve medication adherence
 - Pertinent literature



The Vision of Hypertension Control Globally



Moving Forward Together

- Strong partnerships between Ministries of Health, CDC, PAHO, and other government health care entities
- Active partnership and engagement from relevant professional associations and NGOs, civil society
- Interest, commitment, and will to increased hypertension treatment rates and decrease related morbidity and mortality
- Resources – staff, funding, treatment protocols, procurement mechanisms for medications
- Collaboration, information sharing, creativity, flexibility and optimism



Thank you!

For more information, please contact:

globalncds@cdc.gov